

WHAT IS CLAIMED:

1. A dual blunting needle assembly comprising:

a hub including a longitudinal wall having an internal lumen extending between opposing first and second ends and an opening extending therethrough into said internal lumen;

an intravenous puncture tip extending from said first end of said hub and a non-patient puncture tip extending from said second end of said hub, said intravenous puncture tip and said non-patient puncture tip in fluid communication;

a first blunting tip in concentric relation with and proximate said intravenous puncture tip and a second blunting tip in concentric relation with and proximate said non-patient blunting tip; and

an actuator with first and second portions displaceable with respect to each other, said actuator extending through said opening of said wall of said hub and in engagement with either said intravenous puncture tip and said non-patient puncture tip or with said first blunting tip and said second blunting tip, wherein movement of said actuator within said opening causes said first and second portions to move with respect to each other, thereby causing relative axial displacement between said intravenous puncture tip and said first blunting tip such that said intravenous puncture tip is blunted by said first blunting tip, and between said non-patient puncture tip and said second blunting tip such that said non-patient puncture tip is blunted by said second blunting tip.

2. A needle assembly as in claim 1, wherein said movement of said actuator causes said intravenous puncture tip and said non-patient puncture tip to be simultaneously blunted by said first blunting tip and said second blunting tip, respectively.

3. A needle assembly as in claim 1, wherein said movement of said actuator causes said intravenous puncture tip and said non-patient puncture tip to be consecutively blunted by said first blunting tip and said second blunting tip, respectively.

4. A needle assembly as in claim 1, wherein said actuator includes a bent portion extending through said opening.

5. A needle assembly as in claim 1, wherein said opening comprises a circumferential opening, and circumferential rotation of said actuator about an axis defining said needle assembly within said opening causes said first and second portions of said actuator to move with respect to each other.

6. A needle assembly as in claim 5, wherein said actuator includes a bent portion extending through said opening, said bent portion biasing said first and second portions of said actuator against opposing surfaces of said opening.

7. A needle assembly as in claim 6, wherein said bent portion acts as a handle for said rotation of said actuator.

8. A needle assembly as in claim 6, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion.

9. A needle assembly as in claim 8, wherein said circumferential track includes a continuous change in the distance between said first surface and said second surface from said first track portion to said second track portion.

10. A needle assembly as in claim 8, wherein said circumferential track includes a variable change in the distance between said first surface and said second surface from said first track portion to said second track portion.

11. A needle assembly as in claim 1, wherein said intravenous puncture tip and said non-patient puncture tip extend from opposing ends of a cannula having a through-hole for fluid flow therethrough.

12. A needle assembly as in claim 11, wherein said first blunting tip extends from a first blunting member and said second blunting tip extends from a second blunting member, wherein a first end of said actuator is attached to said first blunting member and a second end of said actuator is attached to said second blunting member, and wherein said movement of said actuator causes said first and second portions to move with respect to each other, thereby causing said first blunting member and said second blunting member to axially displace with respect to each other and with respect to said intravenous puncture tip and said non-patient puncture tip so as to cause blunting of said intravenous puncture tip and said non-patient puncture tip.

13. A needle assembly as in claim 12, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion, wherein a first portion of said actuator which is adjacent said first blunting member cooperates with said first surface and a second portion of said actuator which is adjacent said second blunting member cooperates with said second surface, and wherein said actuator includes a bent portion between said first portion and said second portion, said bent portion biasing said first portion against said first surface and biasing said second portion against said second surface.

14. A needle assembly as in claim 1, wherein said first blunting tip and said second blunting tip extend from opposing ends of a blunting member.

15. A needle assembly as in claim 14, wherein said intravenous puncture tip extends from a first cannula and said non-patient puncture tip extends from a second cannula, and wherein a first end of said actuator is attached to said first

cannula and a second end of said actuator is attached to said second cannula, and wherein said movement of said actuator causes said first and second portions to move with respect to each other, thereby causing said first cannula and said second cannula to axially displace with respect to each other and with respect to said first blunting tip and said second blunting tip so as to causing blunting of said intravenous puncture tip and said non-patient puncture tip.

16. A needle assembly as in claim 15, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion, wherein a first portion of said actuator which is adjacent said first cannula cooperates with said first surface and a second portion of said actuator which is adjacent said second cannula cooperates with said second surface, and wherein said actuator includes a bent portion between said first portion and said second portion, said bent portion biasing said first portion against said first surface and biasing said second portion against said second surface.

17. A needle assembly as in claim 1, further comprising structure for attaching said needle assembly to a holder capable of holding blood collection tubes.

18. A needle assembly as in claim 1, wherein said hub includes external threads for engagement with cooperating internal threads on a separate needle holder for threaded attachment of said needle assembly to said needle holder.

19. A needle assembly as in claim 1, wherein said hub includes structure for attachment of a needle cover.

20. A safety assembly as in claim 1, wherein said needle assembly includes structure for preventing relative axial displacement between said intravenous puncture tip and said first blunting tip after said intravenous puncture tip is blunted by

said first blunting tip, and between said non-patient puncture tip and said second blunting tip after said non-patient puncture tip is blunted by said second blunting tip.

21. A needle assembly as in claim 20, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion, and wherein said circumferential track includes structure for preventing movement of said flexible actuator in a reverse direction within said track.

22. A dual blunting needle assembly comprising:

a hub including a longitudinal wall having an internal lumen extending between opposing first and second ends and an opening extending through said longitudinal wall into said internal lumen and extending circumferentially around said longitudinal wall forming a circumferential track having a first track portion having a first track opening extending in an axial direction and a second track portion having a second track opening extending in said axial direction for a distance greater than said first track opening;

a cannula having an internal lumen extending therethrough between an intravenous puncture tip extending from said first end of said hub and a non-patient puncture tip extending from said second end of said hub;

a first blunting member in concentric relation with and proximate said intravenous puncture tip and a second blunting member in concentric relation with and proximate said non-patient blunting tip; and

an actuator having a first end attached to said first blunting member and a second end attached to said second blunting member, a first portion and a second portion of said actuator biased between said first end and said second end forming a bent portion extending through said circumferential track, wherein circumferential rotation of said bent portion from said first track portion to said second track portion causes relative axial movement of said first portion and said second portion of said actuator, thereby causing relative axial displacement of said first blunting member and

said second blunting member with respect to said intravenous puncture tip and non-patient puncture tip respectively such that said intravenous puncture tip is blunted by said first blunting member and said non-patient puncture tip is blunted by said second blunting member.

23. A method for blunting a needle assembly, comprising the step of bending or flexing an actuator within an opening extending through a hub of a dual blunting needle assembly, thereby causing relative axial displacement between an intravenous puncture tip and a first blunting tip such that said intravenous puncture tip is blunted by said first blunting tip, and between a non-patient puncture tip and a second blunting tip, such that said non-patient puncture tip is blunted by said second blunting tip.

24. The method as in claim 23, wherein said bending or flexing of said actuator causes said intravenous puncture tip and said non-patient puncture tip to be simultaneously blunted by said first blunting tip and said second blunting tip, respectively.

25. The method as in claim 23, wherein said bending or flexing of said actuator causes said intravenous puncture tip and said non-patient puncture tip to be consecutively blunted by said first blunting tip and said second blunting tip, respectively.

26. The method as in claim 23, wherein said opening extends through said hub at least partially about a circumference thereof, and wherein said bending or flexing of said actuator is achieved through circumferential rotation of said actuator about an axis defining said needle assembly within said opening.

27. A dual blunting needle assembly comprising:
a hub including a longitudinal wall having an internal lumen extending between opposing first and second ends and an opening extending therethrough into said internal lumen;

an intravenous puncture tip extending from said first end of said hub and a non-patient puncture tip extending from said second end of said hub, said intravenous puncture tip and said non-patient puncture tip in fluid communication;

a first blunting tip in concentric relation with and proximate said intravenous puncture tip and a second blunting tip in concentric relation with and proximate said non-patient blunting tip; and

a flexible actuator extending through said opening of said wall of said hub and in engagement with either said intravenous puncture tip and said non-patient puncture tip or with said first blunting tip and said second blunting tip, wherein flexing or bending movement of said flexible actuator within said opening causes relative axial displacement between said intravenous puncture tip and said first blunting tip such that said intravenous puncture tip is blunted by said first blunting tip, and between said non-patient puncture tip and said second blunting tip such that said non-patient puncture tip is blunted by said second blunting tip.

28. A needle assembly as in claim 27, wherein said intravenous puncture tip and said non-patient puncture tip extend from opposing ends of a cannula having a through-hole for fluid flow therethrough.

29. A needle assembly as in claim 28, wherein said first blunting tip extends from a first blunting member and said second blunting tip extends from a second blunting member, wherein a first end of said flexible actuator is attached to said first blunting member and a second end of said flexible actuator is attached to said second blunting member, and wherein flexing or bending of said flexible actuator causes said first blunting member and said second blunting member to axially displace with respect to each other and with respect to said intravenous puncture tip and said non-patient puncture tip so as to cause blunting of said intravenous puncture tip and said non-patient puncture tip.

30. A needle assembly as in claim 29, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface

being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion, wherein a first portion of said flexible actuator which is adjacent said first blunting member cooperates with said first surface and a second portion of said flexible actuator which is adjacent said second blunting member cooperates with said second surface, and wherein said flexible actuator includes a bent portion between said first portion and said second portion, said bent portion biasing said first portion against said first surface and biasing said second portion against said second surface.

31. A needle assembly as in claim 26, wherein said first blunting tip and said second blunting tip extend from opposing ends of a blunting member.

32. A needle assembly as in claim 31, wherein said intravenous puncture tip extends from a first cannula and said non-patient puncture tip extends from a second cannula, and wherein a first end of said flexible actuator is attached to said first cannula and a second end of said flexible actuator is attached to said second cannula, and wherein flexing or bending of said flexible actuator causes said first cannula and said second cannula to axially displace with respect to each other and with respect to said first blunting tip and said second blunting tip so as to causing blunting of said intravenous puncture tip and said non-patient puncture tip.

33. A needle assembly as in claim 32, wherein said opening comprises a circumferential track defining a first track portion and a second track portion and including a first surface and an opposing second surface, said first surface being axially spaced from said second surface at a greater distance at said second track portion than at said first track portion, wherein a first portion of said flexible actuator which is adjacent said first cannula cooperates with said first surface and a second portion of said flexible actuator which is adjacent said second cannula cooperates with said second surface, and wherein said flexible actuator includes a bent portion between said first portion and said second portion, said bent portion biasing said first portion against said first surface and biasing said second portion against said second surface.